

## Custom Work Orders Requisition

Page 1 of 1

Work order No.: 59285 / 60332  
54231 / 56232

### Pick list

| Qty                                  | Part Number  | Batch Number | Description      | Cost | Initial | Date        |
|--------------------------------------|--------------|--------------|------------------|------|---------|-------------|
| 1                                    | D412-709-04  | 58231        | Aft firing seat  |      |         |             |
| 1                                    | D412-769-04  | 58232        | "                |      |         |             |
| 1                                    | D412-702-345 | 59285        | shoulder harness |      |         |             |
| 1                                    | D412-702-345 | 60332        | "                |      |         |             |
| 16                                   | ms 24665-229 | 111041       | cotton pin       |      | BT      | 10-07-06    |
| Assemble per drawing DSI 9469 Rev. B |              |              |                  |      |         | BT 10-07-06 |
| <del>DC 5</del>                      |              |              |                  |      |         |             |
| DC 5 → S 18/57/06 x 2 sets           |              |              |                  |      |         | BT          |
| PL ms/10-07-06 x 2                   |              |              |                  |      |         |             |
| DC 21                                |              |              |                  |      |         | 10/08/07    |
| Close w/o                            |              |              |                  |      |         |             |

**Note:** Material pick list must be pre-approved by

Dept. Head: W Date: 10-27-06

&

Purchasing: \_\_\_\_\_ Date: \_\_\_\_\_

|                  |     |       |
|------------------|-----|-------|
| Close work order | By: | Date: |
|------------------|-----|-------|

# DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D412-702 REV. E AND  
INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D412-702 REV. 3

REF TCCA STC: SH04-7  
REF FAA STC: SR01997NY  
REF EASA STC: EASA.IM.R.S.00710

## PURPOSE:

Update the D412-702-041A/045A/041B/045B kits for compatibility with the Dart D412-769-011 Aft Facing Seat Kit.

## CHANGE:

Quantity (1) each of D412-702-111A/113A is replaced with D412-702-121A/123A. Also Qty (4) x AN4-27A bolts are added to the kits for compatibility with the Dart seat. When installing the AN4 bolts in the Dart seat, open the Ø0.188" holes to Ø0.257" (see sheet 4 detail J of this service instruction for reference). Alternate nuts added (see flag note 2 & 3, sheet 4). The parts list in section 25.28 (pg. 87) of ICA-D412-702 Rev. 3 and section 7.0 (pg. 38) of IIN-D412-702 Rev. E is amended as follows:

| QTY<br>-041A | QTY<br>-043A | QTY<br>-045A | QTY<br>-047A | QTY<br>-049A | PART NUMBER   | DESCRIPTION                                        |
|--------------|--------------|--------------|--------------|--------------|---------------|----------------------------------------------------|
| X            |              |              |              |              | D412-702-041A | Dart 13-Man 3-Point Shoulder Harness Kit           |
|              |              | X            |              |              | D412-702-045A | Dart 4-Man 3-Point Aft Facing Shoulder Harness Kit |

## IS:

|    |  |    |  |  |               |                             |
|----|--|----|--|--|---------------|-----------------------------|
| 1  |  | 1  |  |  | D412-702-111A | HARNESS ASSEMBLY (EXISTING) |
| 1  |  | 1  |  |  | D412-702-121A | HARNESS ASSEMBLY (NEW)      |
| 1* |  | 1* |  |  | D3570-3       | BRACKET                     |
| 1* |  | 1* |  |  | D3579-043     | SHOULDER HARNESS            |
| 4* |  | 4* |  |  | MS24694S50    | SCREW                       |
| 4* |  | 4* |  |  | AN960JD10L    | WASHER                      |
| 1* |  | 1* |  |  | MS21042L3     | NUT                         |
| 1* |  | 1* |  |  | D3569-1       | DECAL                       |
| 1  |  | 1  |  |  | D412-702-113A | HARNESS ASSEMBLY (EXISTING) |
| 1  |  | 1  |  |  | D412-702-123A | HARNESS ASSEMBLY (NEW)      |
| 1* |  | 1* |  |  | D3570-4       | BRACKET                     |
| 1* |  | 1* |  |  | D3579-044     | SHOULDER HARNESS            |
| 4* |  | 4* |  |  | MS24694S50    | SCREW                       |
| 4* |  | 4* |  |  | AN960JD10L    | WASHER                      |
| 1* |  | 1* |  |  | MS21042L3     | NUT                         |
| 1* |  | 1* |  |  | D3569-2       | DECAL                       |
| 4  |  | 4  |  |  | AN4-27A       | BOLT (NEW)                  |

## WAS:

|   |  |   |  |  |               |                  |
|---|--|---|--|--|---------------|------------------|
| 2 |  | 2 |  |  | D412-702-111A | HARNESS ASSEMBLY |
| 2 |  | 2 |  |  | D412-702-113A | HARNESS ASSEMBLY |

\* DENOTES THAT PART IS INCLUDED WITH ASSEMBLY ABOVE

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED

BY: *[Signature]*  
D. SHEPHERD (DE # 02)

DATE: 10.01.13  
CERT. NO.: SH04-7  
ISSUE NO.: 3

|            |                                               |                                                                                                                                                                                                                                                                          |              |
|------------|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| C          | UPDATE MS51865-6C ACORN NUT QUANTITY          | JPH                                                                                                                                                                                                                                                                      | 10.01.13     |
| B          | ADD FLAG NOTE 2 & 3 AND OPEN AN3 HOLES TO AN4 | CP                                                                                                                                                                                                                                                                       | 09.12.10     |
| A          | NEW ISSUE, NCR 09-068                         | CP                                                                                                                                                                                                                                                                       | 09.06.30     |
| REV.       | DESCRIPTION                                   | BY                                                                                                                                                                                                                                                                       | DATE         |
| DESIGN     |                                               | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA                                                                                                                                                                                                                 |              |
| DRAWN      |                                               |                                                                                                                                                                                                                                                                          |              |
| CHECKED    |                                               | DRAWING NO.                                                                                                                                                                                                                                                              | REV. C       |
| MFG. APPR. | N/A                                           | DSI 9469                                                                                                                                                                                                                                                                 | SHEET 1 OF 5 |
| APPROVED   |                                               | TITLE                                                                                                                                                                                                                                                                    | SCALE        |
| DE APPR.   |                                               | AFT-FACING SEAT UPDATE                                                                                                                                                                                                                                                   | NTS          |
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The parts list in section 25.28 (pg. 93) of ICA-D412-702 Rev. 3 and section 7.0 (pg. 40) of IIN-D412-702 Rev. E is amended as follows:

| QTY<br>-041B | QTY<br>-043B | QTY<br>-045B | QTY<br>-047B | QTY<br>-049B | PART NUMBER   | DESCRIPTION                                        |
|--------------|--------------|--------------|--------------|--------------|---------------|----------------------------------------------------|
| X            |              |              |              |              | D412-702-041B | Dart 13-Man 3-Point Shoulder Harness Kit           |
|              |              | X            |              |              | D412-702-045B | Dart 4-Man 3-Point Aft Facing Shoulder Harness Kit |

IS:

|    |  |    |  |  |               |                             |
|----|--|----|--|--|---------------|-----------------------------|
| 1  |  | 1  |  |  | D412-702-111B | HARNESS ASSEMBLY (EXISTING) |
| 1  |  | 1  |  |  | D412-702-121B | HARNESS ASSEMBLY (NEW)      |
| 1* |  | 1* |  |  | D3570-3       | BRACKET                     |
| 1* |  | 1* |  |  | D3579-047     | SHOULDER HARNESS            |
| 4* |  | 4* |  |  | MS24694S50    | SCREW                       |
| 4* |  | 4* |  |  | AN960JD10L    | WASHER                      |
| 1* |  | 1* |  |  | MS21042L3     | NUT                         |
| 1* |  | 1* |  |  | D3569-3       | DECAL                       |
| 1  |  | 1  |  |  | D412-702-113B | HARNESS ASSEMBLY (EXISTING) |
| 1  |  | 1  |  |  | D412-702-123B | HARNESS ASSEMBLY (NEW)      |
| 1* |  | 1* |  |  | D3570-4       | BRACKET                     |
| 1* |  | 1* |  |  | D3579-048     | SHOULDER HARNESS            |
| 4* |  | 4* |  |  | MS24694S50    | SCREW                       |
| 4* |  | 4* |  |  | AN960JD10L    | WASHER                      |
| 1* |  | 1* |  |  | MS21042L3     | NUT                         |
| 1* |  | 1* |  |  | D3569-3       | DECAL                       |
| 4  |  | 4  |  |  | AN4-27A       | BOLT (ADD)                  |

WAS:

|   |  |   |  |  |               |                  |
|---|--|---|--|--|---------------|------------------|
| 2 |  | 2 |  |  | D412-702-111B | HARNESS ASSEMBLY |
| 2 |  | 2 |  |  | D412-702-113B | HARNESS ASSEMBLY |

\* DENOTES THAT PART IS INCLUDED WITH ASSEMBLY ABOVE

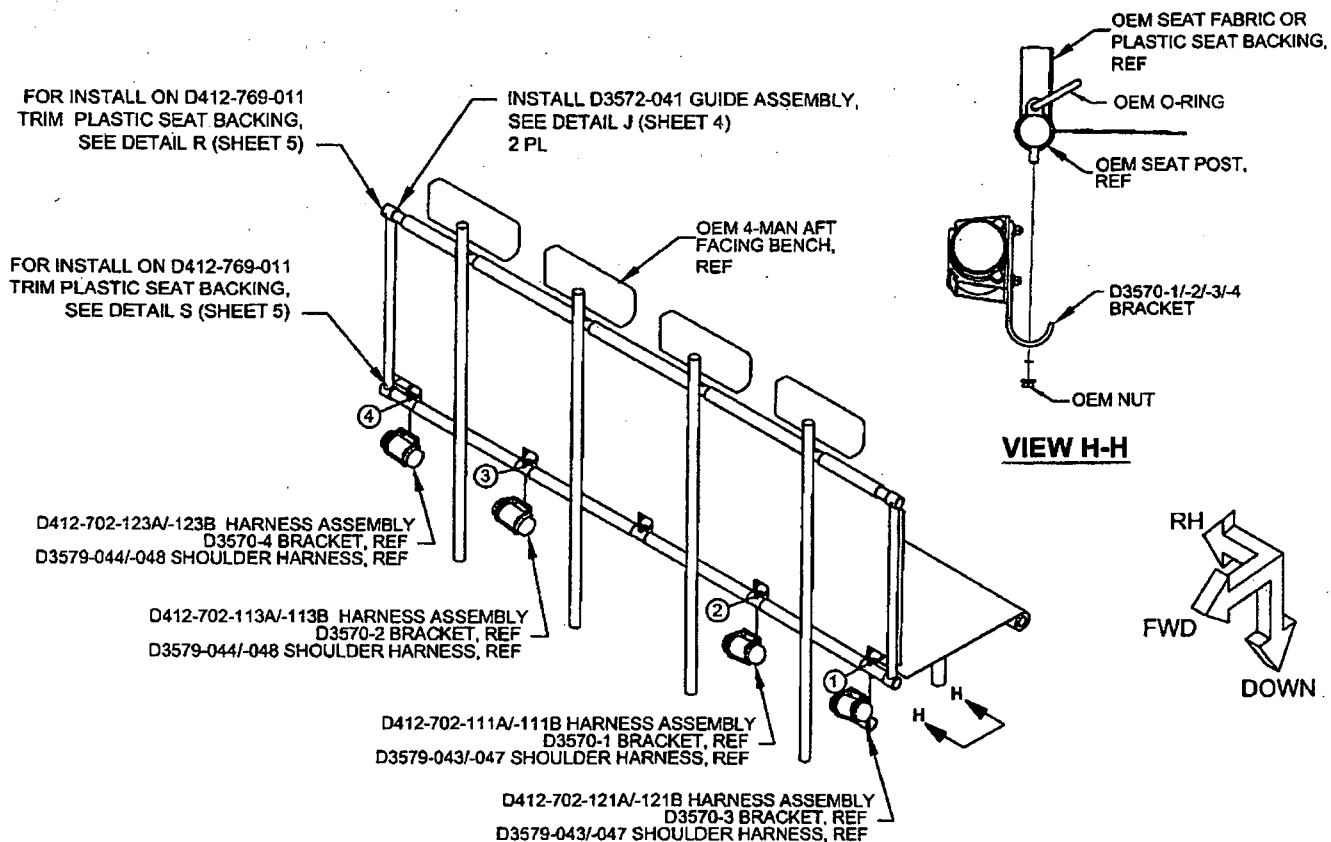
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DAO # 01-Q-01

APPROVED  
*[Signature]*  
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DATE: 10.01.13  
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| MFG. APPR. | N/A                | DSI 9469                                                                                                                                                                                                                                                                 | SHEET 2 OF 5 |
| APPROVED   | <i>[Signature]</i> | TITLE                                                                                                                                                                                                                                                                    | SCALE        |
| DE APPR.   | <i>[Signature]</i> | AFT-FACING SEAT UPDATE                                                                                                                                                                                                                                                   | NTS          |
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Figures 4.8 (pg. 25) of IIN-D412-702 Rev. E and 25.12 (pg. 69) of ICA-D412-702 Rev. 3 are updated as follows:



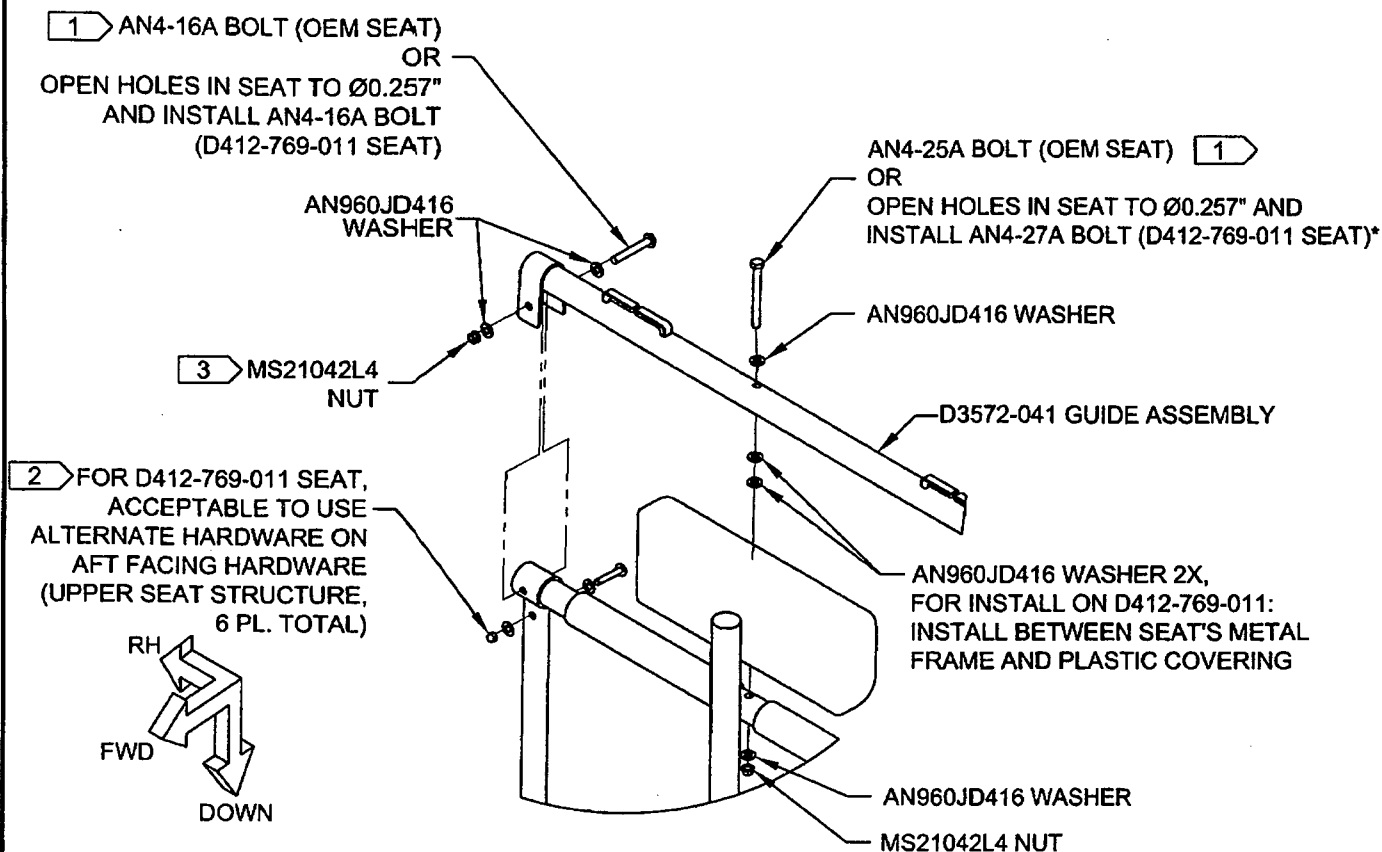
**FIGURE 4.8. SHOULDER BELT INSTALLATION**  
**FIGURE 25.12 D412-702-045A/-045B 4-MAN 3-POINT AFT FACING SHOULDER HARNESS KIT**

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| MFG. APPR. | N/A      | DSI 9469                                                                                                                                                                                                                                                                 | SHEET 3 OF 5 |
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**DETAIL J: D3572-041 INSTALLATION**  
(RH SHOWN, LH OPPOSITE)

- 1 ACCEPTABLE TO USE LONGER/SHORTER AN4 BOLTS,  
ADD ADDITIONAL AN960JD416 WASHERS, OR SUBSTITUTE  
AN960JD416L WASHERS TO ENSURE 1.5-2 THREADS IN SAFETY
- 2 ACCEPTABLE TO USE MS51865-6C AS ALTERNATE NUT (6 PLACES  
TOTAL PER D412-769-011 SEAT KIT). IF ALT NUT IS USED, ADD  
AN960JD10/10L WASHER AS REQD (HEAD BOLT SIDE) TO ENSURE  
PROTRUDING THREADS MEASURE 0.160 MIN, 0.190 MAX. (BEFORE  
NUT INSTALLATION)
- 3 ACCEPTABLE TO USE MS51865-8C AS ALTERNATE NUT (2 PLACES  
TOTAL PER D412-769-011 SEAT KIT). IF ALT NUT IS USED, ADD  
AN960JD416/416L WASHER AS REQD (HEAD BOLT SIDE) TO ENSURE  
PROTRUDING THREADS MEASURE 0.200 MIN, 0.250 MAX. (BEFORE  
NUT INSTALLATION)

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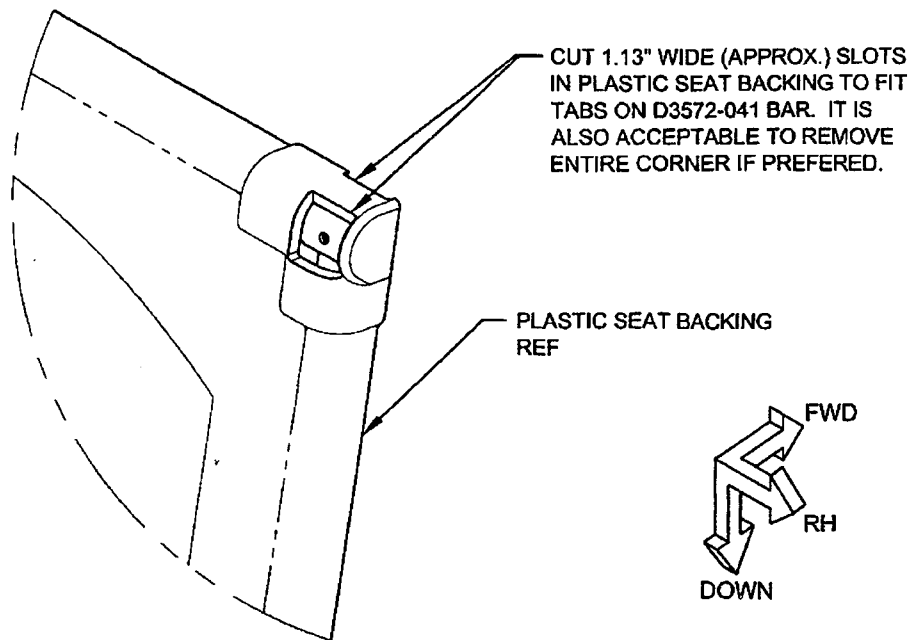
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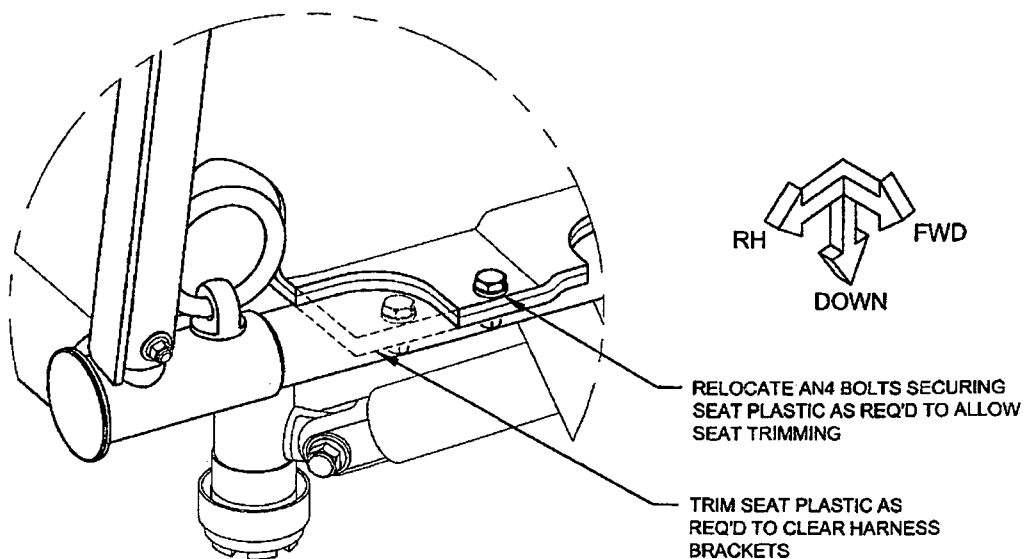
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| CHECKED                                                                                                                                                                                                                        |          | DRAWING NO.                            | REV. C       |
| MFG. APPR.                                                                                                                                                                                                                     | N/A      | DSI 9469                               | SHEET 4 OF 5 |
| APPROVED                                                                                                                                                                                                                       |          | TITLE                                  | SCALE        |
| DE APPR.                                                                                                                                                                                                                       |          | AFT-FACING SEAT UPDATE                 | NTS          |
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#### DETAIL R

VIEW LOOKING AT FRONT OF SEAT BACKING, TOP-RH CORNER SHOWN (TOP-LH CORNER SIMILAR),  
FOR INSTALL ON D412-769-011 ONLY



#### DETAIL S






VIEW LOOKING AT REAR OF SEAT, BOTTOM-RH CORNER SHOWN (BOTTOM-LH CORNER SIMILAR),  
FOR INSTALL ON D412-769-011 ONLY

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED

BY: *[Signature]*  
D. SHEPHERD (DE # 02)

DATE: 10.01.13  
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| MFG. APPR. | N/A                                                                                 | DSI 9469                                                                                                                                                                                                                       | SHEET 5 OF 5 |
| APPROVED   |  | TITLE                                                                                                                                                                                                                          | SCALE        |
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